



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2004IA63B

Title: Vegetative Filter Education and Assessment in the State of Iowa

Project Type: Research

Focus Categories: Nutrients, Sediments

Keywords: Vegetative filters, water quality, nutrients, sediment, assessment, education, impaired water-bodies, surface runoff, TMDL

Start Date: 08/01/2004

End Date: 07/31/2006

Federal Funds: \$20,000

Non-Federal Matching Funds: \$40,940

Congressional District: 4th

Principal Investigators:

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Abstract

Vegetative filters are a best management practice used for the removal of sediment and other pollutants from overland flow from agricultural watersheds. Although there has been a significant number of vegetative filters installed in Iowa, there is little information about the in-field water quality performance of these systems. The overall vision and goals for this project are to assess current vegetative filters in the state of Iowa to evaluate their effectiveness and educate interested stakeholders on the performance of vegetative filters. This data would be used to analyze the performance of the vegetative filters and investigate whether filter performance can be enhanced through design modifications. Based on this, the objectives of the project, this project will (1) develop educational and assessment tools for evaluating the performance of vegetative filters, (2) identify sites for assessment, (3) educate junior high and high school students on vegetative filter performance and surface water runoff issues related to water quality and biodiversity, and (4) assess the performance of vegetative filters within Iowa using site assessment tools

developed and students educated through the project. This project will assist in promoting research, information transfer, and education on water resources and water quality issues in Iowa along with improving the understanding of the processes and impacts of nutrients from agriculture on water quality and the role of sediment on health of lakes and streams.